

Application No.: 10/674,726
Amendment and Response dated December 15, 2005
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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the subject application, and please amend the claims as follows:

Claims 1.-35. (Canceled)

Claim 36. (Currently amended): A stent-graft including:

a radially compressible and radially expandable annealed tubular body having open ends and a sidewall structure having openings therethrough, and consisting essentially of comprising a bioabsorbable filaments portion; and

a compliant graft layer cooperating with the tubular body to form a stent-graft implantable at a treatment site in a body lumen, wherein the compliant graft layer tends to conform to the tubular body as the tubular body radially expands and contracts;

wherein the tubular body is radially expandable upon deployment of the stent-graft at the treatment site to provide radial structural support at an initial level sufficient to fix the stent-graft at the treatment site and maintain patency of the body lumen; and

a bioabsorbable adhesive for bonding the tubular body and the graft layer at least over a coextensive portion of the tubular body and the graft layer;

characterized in that wherein the radial structural support provided by the tubular body is reduced over time responsive to absorption of the bioabsorbable filaments portion in-vivo following deployment, and further wherein in that the graft layer in-vivo is adapted to remain at the treatment site during said absorption of the bioabsorbable filaments portion while being receptive to growth of body tissue therein and thereabout over time, to form with said body tissue a composite wall adapted to provide the radial structural support in lieu of the tubular body.

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Claim 37. (Previously presented): The stent-graft of claim 36 wherein:
the tubular body is radially self-expandable and adjustable between a nominal state and
a reduced-radius state.

Claim 38. (Currently amended): The stent-graft of claim 37 wherein:
the tubular body when deployed at the treatment site is adapted to exert a radial force to
so fix the stent-graft and so maintain patency, and the radial force is gradually reduced during
said absorption of the bioabsorbable filaments portion.

Claim 39. Currently amended): The stent-graft of claim 36 wherein:
the bioabsorbable filaments are ~~tubular body comprises a plurality of elongated,~~
helically wound bioabsorbable filaments.

Claim 40-41. (Canceled)

Claim 42. (Currently amended): The stent-graft of claim 36 [[40]] wherein:
the adhesive occupies only proximal and distal end portions of said coextensive portion.

Claim 43. (Previously presented): The stent-graft of claim 36 wherein:
the tubular body consists essentially of a material selected from the group consisting of:
poly (alpha-hydroxy acid), PGA, PLA, PLLA, PDLA, polycaprolactone, polydioxanone,
polygluconate, polylactic acid-polyethylene oxide copolymers, modified cellulose, collagen,
poly (hydroxybutyrate), polyanhydride, polyphosphoester, poly (amino acids), or combinations
thereof.

Claim 44. (Previously presented): The stent-graft of claim 36 wherein:
the stent-graft is adapted to be permeated with body tissue.

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Claim 45. (Previously presented): The stent-graft of claim 36 wherein:
the graft layer is disposed on at least one of an inside surface of the tubular body and an outside surface of the tubular body.

Claim 46. (Currently amended): The stent-graft of claim 36 wherein:
~~the bioabsorbable filaments are tubular body is comprised of a plurality of interbraided bioabsorbable structural filaments.~~

Claim 47. (Previously presented): The stent-graft of claim 46 wherein:
the graft layer is comprised of a plurality of interbraided graft filaments.

Claim 48. (Previously presented): The stent-graft of claim 36 wherein:
the graft layer is adapted to remain permanently at the treatment site.

Claim 49. (Canceled)

Claim 50. (Previously presented): The stent-graft of claim 36 wherein:
the graft layer comprises a plurality of interwoven components selected from the group of components consisting of: fibers, monofilaments, multi-filaments, and yarns.

Claim 51. (Previously presented): The stent-graft of claim 36 wherein:
the graft layer consists essentially of a material selected from the group consisting of: PET, ePTFE, PCU, PU and combinations thereof.

Claim 52. (Currently amended): A stent-graft including:
a radially compressible and radially expandable tubular body having open ends, a sidewall structure having openings therethrough, an inside surface, an outside surface, and consisting essentially of comprising a bioabsorbable filaments portion; and

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a first graft layer disposed on at least one of the inside surface and the outside surface, cooperating with the tubular body to form a stent-graft implantable at a treatment site in a body lumen, said first graft layer being more compliant than the tubular body and tending to conform to the tubular body as the tubular body radially expands and contracts; and

a bioabsorbable adhesive for bonding the tubular body and the first graft layer;

wherein the tubular body is radially expandable upon deployment of the stent-graft at the treatment site to provide radial structural support at an initial level sufficient to fix the stent-graft at the treatment site and maintain patency of the body lumen;

wherein the radial structural support provided by the tubular body is reduced over time responsive to absorption of the bioabsorbable filaments portion in-vivo following deployment; and

wherein the first graft layer is substantially non-absorbable in-vivo and receptive to growth of body tissue therein and thereabout over time, to form with the body tissue a composite wall adapted to provide the radial structural support in lieu of the tubular body.

Claim 53. (Currently amended): The stent-graft of claim 52 wherein:

the tubular body is radially self-expandable and adapted to exert a radial force when deployed at the treatment site to so fix the stent-graft and so maintain patency, and the radial force is gradually reduced during said absorption of the bioabsorbable filaments portion.

Claim 54. (Previously presented): The stent-graft of claim 52 wherein:

the tubular body is adapted to be completely absorbed in-vivo following deployment.

Claim 55. (Previously presented): The stent-graft of claim 52 wherein:

the first graft layer is disposed on the inside surface.

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Claim 56. (Previously presented): The stent-graft of claim 55 further including:
a second graft layer disposed on the outside surface, said second graft layer being more compliant than the tubular body and tending to conform to the tubular body as the tubular body radially expands and contracts.

Claims 57-59. (Canceled)

Claim 60. (Currently amended): The stent-graft of claim 52 [[58]] wherein:
the adhesive occupies only proximal and distal end portions of a coextensive portion over which the tubular body and the first graft layer are coextensive with one another.

Claim 61. (Currently amended): The stent-graft of claim 52 wherein:
~~the bioabsorbable filaments are tubular body is comprised of a plurality of structural filaments braided together.~~

Claim 62. (Previously presented): The stent-graft of claim 61 wherein:
the first graft layer is comprised of a plurality of interbraided graft filaments consisting essentially of a material selected from the group consisting of: PET, ePTFE, PCU, PU, and combinations thereof.

Claim 63. (Canceled)

Claim 64. (Previously presented): The stent-graft of claim 52 wherein:
the tubular body consists essentially of a material selected from the group consisting of: poly (alpha-hydroxy acid), PGA, PLA, PLLA, PDLA, polycaprolactone, polydioxanone, polygluconate, polylactic acid-polyethylene oxide copolymers, modified cellulose, collagen, poly (hydroxybutyrate), polyanhydride, polyphosphoester, poly (amino acids), and combinations thereof.

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Claim 65. (Previously presented): The stent-graft of claim 52 wherein:
the first graft layer is adapted to remain permanently at the treatment site.

Claim 66-76 (Canceled)

Claim 77. (Previously presented): The stent-graft of claim 36 wherein:
the tubular body is adapted to be completely absorbed in-vivo following deployment.